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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/936,647	02/25/2002	Kenneth A. Hodd	10806-177	8743

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EXAMINER

BERMAN, SUSAN W

ART UNIT	PAPER NUMBER
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1711

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DATE MAILED: 08/05/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/936,647

Applicant(s)

HODD ET AL.

Examiner

Susan W Berman

Art Unit

1711

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on _____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 7. 6) ☐ Other:

Art Unit: 1711

Specification

The abstract of the disclosure is objected to because the abstract is not printed on a separate page. Correction is required. See MPEP § 608.01(b).

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-28 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The recitation of "a general formula" in claim 1 renders the claims indefinite because it is not clear whether the photocrosslinkers correspond to the formula set forth or to some other formula of the same general kind. In claim 1, it is not clear what is intended by the phrase "and when said photoreactive groups...network structure". It is not clear what is intended by "determined wavelengths". It is not clear how the radicals generated can be retained on the photocrosslinkers and also react to "accomplish" a crosslinked network structure. In claim 4, does applicant intend to limit the units "C" to ethylene units or to recite how the photoactive group is linked when the units C are ethylene? It is noted that claim 5, as written, does not limit the photocrosslinkers to those containing only ethylene units but merely recites what kinds of ethylene units could be present. Claim 7 does not clearly recite photocrosslinkers of claim 5 wherein R³ is a lactam group, thus providing basis for the recitation that the lactam groups together with units A or B constitute N-vinylpyrrolidone units. It is not clear from the description how the N-vinylpyrrolidone units are structurally present in the macromolecule. Does applicant intend to recite a macromolecule wherein units A or B are obtained by polymerization of N-vinylpyrrolidone? In claim 9, it is not clear whether applicant intends to set forth monomers employed to obtain units A and B in the macromolecule or the actual units A and B in the macromolecule. It is the examiner's understanding that

Art Unit: 1711

the vinyl groups in the monomers have been polymerized to obtain the ethylene units in the macromolecule and would not be present in the macromolecule. In claims 5, 11, 12, and 15, the phrase "selected among...and..." should be replaced with "selected from the group consisting of...and..." or "selected from ...or...". In claim 20, it is not clear from the phrase "light exceeding a wavelength of about 305 nm" whether applicant intends to include wavelengths of 305 nm and slightly less than 305 nm or only wavelengths greater than 305 nm? Claim 21 fails to recite a method step. There is no antecedent basis in claim 25 for the "intraocular lens" recited in claim 26. It is suggested that claim 26 be rewritten to recite "wherein the ophthalmic lens is an intraocular lens produced ...". It is not clear how the method recited in claim 28 provides an intraocular lens in the absence of a step comprising irradiating the composition with light to form a solid article.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 20, 22 and 24 are rejected under 35 U.S.C. 102(b) as being anticipated by Fabrizio et al (4,536,265). Fabrizio et al disclose siloxane polyphotoinitiators having the formula shown in the Abstract.

Art Unit: 1711

Claims 1-6, 20 and 21 are rejected under 35 U.S.C. 102(b) as being anticipated by Angiolini et al in the article "Polymeric Photoinitiators Bearing Side-Chain Benzoyldiphenylphosphineoxide Moieties for UV Curable Coatings". Angiolini et al disclose polymeric photoinitiators wherein the polymeric units are substituted ethylene units and the photoactive group is an acylphosphineoxide group.

Claims 1, 5-14, 20, 21 and 25 are rejected under 35 U.S.C. 102(e) as being anticipated by Chabreck et al (6,087,412). Chabreck et al disclose oligomeric photoinitiators and polymers comprising photoinitiating moieties provided by copolymerizing the oligomeric photoinitiators. The polymers are said to be useful biomedical materials, for ophthalmic lenses intraocular lenses (column 4, lines 49-56). Siloxane and vinyl oligomers or polymers are taught. See column 18, lines 28-32, column 20, lines 45-54.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-28 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-23 of U.S. Patent No. 6,589,550. Although the conflicting claims are not identical, they are not patentably distinct from each other because the components of the aqueous solution set forth in the claims of US '550 include a macromolecular material having functional

Art Unit: 1711

vinyllic, or (meth)acrylic groups and a photoinitiator comprising photoactive groups attached to linear polymers corresponding to the polymer provided with vinyllic or (meth)acrylic groups in the composition recited in method claims 20-28 and the photocrosslinker set forth in instant claims 1-19. Claims 18-19 of US '550 set forth compositions injectable in the capsular bag of the eye and providing the same refractive index as set forth in instant claims 27 for producing an intraocular lens, as set forth in instant claims 26 and 28.

Conclusion

WO 99/08135 or WO 99/08136 are cited as art of interest. WO '135 and WO '136 each teaches effectively curing ophthalmic device materials using a blue light source and 2,4,6-trimethylbenzoyldiphenylphosphine oxide as initiator. WO '135 nor WO '136 suggests incorporating the phosphine oxide initiator into a macromolecule as set forth in instant claim 1.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Susan W Berman whose telephone number is 703 308 0040. The examiner can normally be reached on M-F 9:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on 703 308 2462. The fax phone numbers for the organization where this application or proceeding is assigned are 703 872 9310 for regular communications and 703 872 9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703 308 0661.



Susan W Berman
Primary Examiner
Art Unit 1711

SB
July 30, 2003